

**ALTERNATIVES DEVELOPMENT GROUP (ADG)
SOUTHWEST FLORIDA ENVIRONMENTAL IMPACT STATEMENT
MEETING #6, July 9 - 10, 1998**

MEETING NOTES: Final

The notes provided below document the main points and meeting progress that were offered during the meeting on July 9 through July 10. The notes highlight and summarize the key issues that were discussed at the ADG meeting. The following section provides an overall summary of the meeting, and the remaining sections summarize each of the agenda items as they occurred in the meeting. Selected attachments are provided in this document. Note that copies of this document were provided electronically either through e-mail, facsimile, <http://www.saj.usace.army.mil/permit/projects.htm>, or <ftp://ftp.saj.usace.army.mil/pub/bbarron/readme.htm>. Attachments are included in the electronic version when reasonably possible. Otherwise, the full version with all attachments will be distributed at the next ADG meeting.

Meeting Overview

The Alternatives Development Group (ADG) met on July 9 through July 10, 1998, at The Conservancy auditorium located in Naples, Florida. Of the thirty-three members, thirty-two were represented at the meeting. The roster of attendees is presented in Attachment A. The objectives of this meeting were to (1) receive presentations on the NEPA process, water quality trends, and geographic information system (GIS) initial results, (2) verify evaluation factors, (3) evaluate the Comprehensive Plan alternative for the hub, and (4) refine geographic information system (GIS) requirements. Additional data sources and references were also identified at the sixth meeting. See Attachment B for a complete list.

The meeting began the morning of July 9 with administrative announcements followed by the introduction of members/alternates, observers, and the facilitation team. Dale Brown and Tim Feather, lead facilitator and project manager for Planning and Management Consultants, Ltd., respectively, presented the agenda for the sixth meeting.

The Florida Department of Environmental Protection (DEP) presented statistics on water quality trends in the study area. DEP presented the water quality classification for water bodies in Southwest Florida and the water quality indices.

As requested at meeting five, the ADG was presented initial GIS overlays designed to support the evaluation of alternatives. More specific GIS needs were identified by factor specialty groups. Inaccuracies and revisions of GIS overlays were identified. To support GIS

development activities, the ADG approved the establishment of the GIS council that consists of ADG members that have expertise in GIS.

The factor specialty group met to further examine and discuss the Comprehensive Plan alternative. Each factor specialty group reported an initial appraisal of the Comprehensive Plan alternative or described the details of the analysis that will be conducted once all the needed data are secured.

Administrative Activities

Dale Brown and Tim Feather opened the meeting with administrative activities. These activities included (1) administrative announcements, (2) overview of the fifth meeting, and (3) presentation of the agenda.

Administrative Announcements

The sixth ADG meeting was brought to order on Thursday, July 9, 1998 at 9:05 a.m. Mr. Brown addressed administrative issues regarding facilities, lunch, and other logistical items. The group was reminded to check the sign-in sheet for attendance and correctness. Mr. Brown began the meeting by requesting introductions of members, alternates, observers, and the facilitation team members.

Fifth Meeting Overview

Tim Feather presented an overview of the fifth ADG meeting using presentation materials provided in Attachment F of the notes from the fifth meeting (which were handed out to the group). Mr. Feather presented the (1) activities, (2) accomplishments, and (3) next steps.

Draft meeting notes for the fifth meeting were distributed to the group. Final notes for the fourth meeting were also provided to the group. Comments on the draft notes for the fifth meeting were entertained by the facilitation team. The reference to Estero Bay Agency of Bay Management will be corrected to read Estero Bay Agency on Bay Management. It was also noted that Gary Beardsley provided a historic wetlands inventory for the year 1954 but not 1976. The GIS needs of the property rights factor specialty group were not included in Attachment E of the draft notes from meeting five. Lastly, the acronym SPR refers to spawning potential ratio not species production ratio as it is currently referred to in the draft notes. These items will be corrected and final notes will be distributed to the ADG.

The method of distribution of the meeting notes will be the use of the Jacksonville District's ftp site (<ftp://ftp.saj.usace.army.mil/pub/bbarron/readme.htm>). A complete set of the notes will be provided hardcopy at the next meeting.

Agenda

The agenda for the sixth meeting was presented by Tim Feather. First, the ADG heard an overview of the National Environmental Protection Act (NEPA) from John Hall, representative of the Corps of Engineers regulatory division, with respect to the purpose and the ADG's input to this process. Then, the Florida Department of Environmental Protection (DEP) presented water quality trends for the study area. Mr. Feather and Bob Barron, Corps of Engineers representative, presented the initial GIS products for the ADG and the use of the products beyond the scope of the environmental impact statement (EIS) for Southwest Florida. Next, the facilitation team supported by Wilson, Miller, Barton and Peek, Inc. presented GIS capabilities including overlays of data as well as reports that can aid the ADG in their alternatives development and evaluation. Lastly, the ADG applied the evaluation factors to the Lee and Collier Counties 2010 alternative for the hub. Mr. Feather, to aid the ADG's understanding of the process, again presented a three-dimensional cube that displayed how the alternatives by sub-area will be evaluated using the factors.

Reference Materials

Several new reference materials were added to the list of materials presented in the notes from meeting five. The materials are as follows:

- The Local Impact of Home Building in Naples, Florida
- The Local Impact of Home Building in Lee County, Florida
- National Association of Home Builders Local Impact of Home-building Model
- Interim Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses
- Microcomputers and Economic Analysis: Spreadsheet Templates for Local Government
- Environmentally Sensitive Index (ESI) maps: West Peninsula 2 Florida
- South Lee County Watershed Plan (SFWMD)

These materials have been added to the list of references provided in Attachment B. These materials are referenced throughout the notes.

Commentary on NEPA and the ADG

John Hall provided an overview of NEPA and how the ADG fits into the process. A primary objective of the NEPA documentation is the disclosure of environmental consequences to the public. The alternatives to be developed by the ADG are the heart of the Southwest Florida EIS. The regulatory EIS differs from a public works project EIS in that there can be many alternatives from different perspectives in the regulatory EIS. The public works EIS process results in one preferred alternative for the construction of such infrastructure projects as roads. Also, there is not a Corps of Engineers proponent for any one alternative in a regulatory EIS. There does not need to be one preferred alternative. The intent of the alternatives for this EIS is to compare them not to rank them in order of priority. However, areas of consensus among alternatives may improve the regulatory permit process. The Corps will address the idea of a regional general permit in the study area if appropriate.

An ADG member stated that it was assumed that the ADG had to agree on a preferred alternative for the EIS. Mr. Hall responded by stating that it is not a requirement to have a preferred alternative. Another member asked whether the ADG had to rank the alternatives for the EIS. Mr. Hall stated that the ADG must compare the alternatives but not rank them. However, if consensus in particular locations within the study area is reached, the Corps decisions will be made easier with better direction. One ADG member noted that one should not read into the “commons” map developed at the second ADG meeting. The general nature of the map does not present the many areas of contention. Mr. Hall stated that although there are still many areas of contention he felt many ADG members were surprised that there were many areas of commonality. Ultimately, the Corps has to balance many issues in the permit process and the comparison of alternative by ADG will aid in this balancing process.

Lastly, a member stated that the Natural Resource Conservation Service (NRCS) should be present at the ADG meetings given their role in wetland delineation and permitting on agricultural lands. Mr. Hall responded that certainly the NRCS was considered for participation, but noted that agriculture is represented on the ADG.

Water Quality Trends

Ronald McGregor and Ford Walton both representing DEP presented water quality trends for the study area. DEP’s presentation is provided in Attachment C. DEP presented the water classification system by which water quality of basins, rivers, tributaries, and other water bodies are evaluated. The four classes of water quality are listed below.

- Class 1 suitable for human consumption
- Class 2 suitable for harvest of shellfish
- Class 3 suitable for wildlife and recreation

- Class 4 industrial use

It was stated that all water bodies are initially classified as class three but may be upgraded if the body of water is to produce shellfish or be utilized as a potable water source.

These data are compiled by DEP in the 305 B Report. The DEP representatives presented the selected variables that comprise the water quality index that is compared to the standards set for each classification of water body. Data for water bodies in the study area were presented and described. If the ADG wishes to retrieve specific water quality data, DEP provided two points of contact (1) Joe Hand and (2) Mary Paulic. It would take approximately one week to run a query of the water quality database.

It was quickly realized that water quality data are lacking in Southwest Florida from which to derive any scientific conclusions. This is a state-wide problem. The DEP does not use any predictive models. It is recognized that there are seasonal trends in pollutant loading. DEP has not collected data in the study area since 1994 and the South Florida Water Management District has picked up some of the slack. Estero Bay has one data collection point. This one data point cannot statistically characterize the Bay. It must have random sampling points. Mr. McGregor stated that in general during the period of 1988 through 1998 the water quality of Estero Bay has remained fairly constant. However, he suspects that the water quality of the Bay will decline slightly in the near future.

The data that are collected are stored in a software program called STORET. This program may be queried to generate reports regarding water quality. It was noted that a new windows version of STORET is expected this year. An ADG member stated that a number of developments are required to collect water quality data and wanted to know if this data is stored and able to be retrieved from STORET. DEP stated that at present it is not stored in STORET. DEP is standardizing its collection for these developments making them more reliable from which to make inference.

One member asked whether fresh water was addressed as a pollutant and is it measured. Mr. Walton stated that the DEP relies on indicator species to tell them if fresh water is having an impact. Another member asked whether there were pollution load reduction goals (PLRG) established for the study area. Mr. McGregor indicated that there will be goals established for the study area in the future. A member stated that nutrient loading in Estero Bay is contributing to the reduction of seagrass and the proliferation of algae.

Rainfall has significant implications on water quality. Drought followed by rainfall can add pollutants to water bodies in large doses particularly within the first inch of rain. This is caused by the buildup of pollutants during times of drought. Yet, precipitation dilutes pollutant concentrations as well as flushes pollutants more rapidly.

The question was raised as to how the Corps makes water quality judgments in permit situations. In most instances, the Corps refers to the state agencies, noting that sometimes the EPA can override state decisions if needed.

Geographic Information System Overview

Tim Feather provided the ADG a brief interpretation of how GIS may be used in the development and evaluation of alternatives. He stressed to the ADG to make the best use of available data. Mr. Feather also pointed out that not all evaluation factors will be GIS applicable. He illustrated the basic idea of GIS overlays and the potential usage through a series of transparency overlays. Bob Barron presented an overview of the GIS work that the Corps is conducting for a much larger scope. The Corps regulatory division has developed a comprehensive strategy for the utilization of GIS tools. The results of this effort are not complete. Mr. Barron provided a one page handout regarding the GIS efforts of the Corps. This handout is provided in Attachment D. Mr. Barron points out that GIS mapping is a double edged sword.

Tim Feather and Steve Reis of Wilson, Miller, Barton and Peek, Inc. presented a number of GIS maps requested by the ADG and its factor specialty groups. These maps included:

- existing land use map
- county future land use map
- strategic habitat conservation area map - panther
- national wetlands inventory map
- listed species map
- panther point data map

In addition to the maps, reports of acreage for each land use type were presented to the ADG. These reports are presented in Attachment E.

Mr. Feather stated that this is the Corps' first attempt to provide the ADG with the requested GIS information. The maps represent data available in the public domain or information provided by respective agencies. He opened the floor for the ADG's comments concerning the GIS utilization. It was noted that there are some inaccuracies in the maps. It was stated that at present these maps represent the hub but the ADG must keep in mind the remainder of the study area. The ADG will look at all four sections of the study area. To this end, the ADG will bring all the pieces together and look at the study area as a whole.

It was suggested that soils maps need to be reviewed to determine best use of land. A member commented that soils appropriate for agriculture are almost always appropriate for residential development. A member stated that the ADG needs to see historic maps to better understand trends.

Mr. Feather introduced the group to the idea of GIS interpreters. These interpreters will be able to support the factor specialty groups and report to the ADG each group's GIS needs.

County Comprehensive Plan Alternative: Initial Evaluation

Dale Brown and Tim Feather provided instructions for the activity of evaluating the County Comprehensive Plan as one alternative for the hub. The ADG would breakout into the four factor specialty groups. Each of the four groups would assign an interpreter of the GIS maps and outputs. Each factor specialty group was tasked to complete the following activities.

- review the GIS map set
- revisit evaluation factors (GIS support, no GIS support, other data and information)
- evaluate the County Comprehensive Plan as an alternative for the hub (use best professional judgment)
- identify specific GIS requests
- report the factor specialty group's evaluation of the County Comprehensive Plan alternative by factors and the respective GIS needs

The factor specialty groups were tasked to specify their GIS requests as well as prioritize them. These requests are presented in Attachment F. A summary of the factor specialty group report of progress to the ADG is provided below.

Property Rights

The factor specialty group utilizing a scale of high, medium, and low evaluated the impacts of the County Comprehensive Plan alternative. The group rated the Plan as high for property rights. An ADG member questioned whether the notion of natural resources quality on adjacent property was considered by the factor specialty group. It was noted that the County Comprehensive Plan is dynamic. The group's GIS interpreter, Paul O'Connor, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Local Land Use Policy

Given that the County Comprehensive Plan and the respective Future Land Use Map are the basis of local land use policy, the factor specialty group rated this alternative as high as it pertains to local land use policy. This analysis was very straight forward as this alternative is the one against which all other alternatives will be compared. The group's GIS interpreter, Paul

O'Connor, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Economic Sustainability

The factor specialty group noted that this issue is very complex and the evaluation of the Future Land Use Map or any other alternative is essentially an economic impact study. The group agreed that many county planners have spent many hours to develop the Future Land Use Map thus it is probably most representative of an optimal economic alternative for the hub. An ADG member stated that County Comprehensive Plan alternative does not address the issue of economic sustainability given the need for a diverse economy in the study area. Another ADG member stated that Lee and Collier Counties have economic development plans that would foster economic sustainability.

An ADG member stated that socioeconomic studies are completed in the creation of the economic development plans. This member presented to the factor specialty group and the ADG a reference titled *Microcomputers and Economic Analysis: Spreadsheet Templates for Local Government (revised and expanded edition 1987)* that may aid the group in the evaluation of alternatives through economic based models. The group's GIS interpreter, Paul O'Connor, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Regulatory Efficiency and Effectiveness

The factor specialty group was not able to evaluate the County Comprehensive Plan alternative. The group stated that until other alternatives have been developed there is nothing to determine or compare whether the alternative is more efficient or effective in terms of regulatory process. The group's GIS interpreter, Bob Barron, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Avoidance of Wetland Impacts

The factor specialty group stated that the County Comprehensive Plan alternative should reflect a level of risk based on density classifications. Given this reclassification, the group felt that there are some high risk areas with respect to avoidance of wetland impacts. The group to best estimate wetland impacts will present a simplistic model to address wetlands acreage and function impacts. The group will develop a functional table to aid in the GIS process. The

group's GIS interpreter, Bob Barron, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Mitigation

The factor specialty group evaluated the County Comprehensive Plan alternative as it pertains to mitigation. It was noted by the group that the Future Land Use Plan does not explicitly recognize mitigation opportunities. The group's GIS interpreter, Bob Barron, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Ecosystem Function, Wildlife Habitat, and Listed Species

The factor specialty group evaluated the County Comprehensive Plan alternative with the twelve identified evaluation factors. The group noted that the land cover map as opposed to the land use map is most appropriate for their evaluation of alternatives. The group utilized the existing land cover as the null as to whether the alternative being evaluated by factor was negatively, positively, or not different from the existing land cover. Given the twelve factors and existing cover for the County Comprehensive Plan alternative, nine of the twelve factors were determined to be negatively different from the existing cover. Thus, this alternative has a negative impact on ecosystem function, wildlife habitat, and listed species within the hub.

The group's GIS interpreter, Jim Beever, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F. The group requested bear and panther mortality point data be presented geographically. Also, the group would like listed species point data maps.

Cumulative and Secondary Impacts

Utilizing the eleven identified evaluation factors, the group evaluated the County Comprehensive Plan alternative for the hub. The group referred to the existing land use map. The group utilized the existing land use map as the null as to whether the alternative being evaluated by factor was negatively, positively, or not different from the existing land use map. Given the eleven factors and existing land use map, for the County Comprehensive Plan alternative seven of the factors were determined to be negatively different from the existing land use and three were not able to be calculated at this point without WRAP. One evaluation factor (E11) would have been positive if public lands were displayed on the alternative. The group's GIS interpreter, Jim Beever, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Public Lands Management / Use

The factor specialty group was unable to evaluate the County Comprehensive Plan alternative without the mapping of public lands. Obviously, one of the GIS requests of this group is a map of publicly owned lands. It was determined that one of the three evaluation factors is GIS applicable. The group's GIS interpreter, Jim Beever, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Water Quality

The factor specialty group addressing the issue of water quality will in part utilize the DEP classification of water quality. The group will evaluate the impact of alternatives against the water body's current designation (i.e., fishable and swimmable designation). The group anticipates combining several methodologies to effectively evaluate alternatives with respect to water quality. The group stated that there are approximately twenty-five subbasins in the entire study area. The impacts of a particular alternative are a function of land use type and acreage. Results of these analyses will be provided at the eighth ADG meeting. The refinement of evaluation factors is presented in Attachment G.

A member of the ADG stated that there exists an indices of water quality impacts by land use type. The group may use the SFWMD models as well as the South Lee County models as tools in their evaluation. The group stated that evaluating groundwater impacts are difficult. An option of evaluation of groundwater impacts in GIS is to review developed acres overlying area of significant recharge. The group at this point was not able to evaluate the County Comprehensive Plan alternative. An ADG member asked whether the factor specialty group intends to adjust for different management perspectives. The group responded that it is part of the complexity of evaluation. Another member stated that private development addresses water quality as part of the design and permit conditions. Another comment encouraged a watershed approach to evaluate water quality. The group's GIS interpreter, Jeff Rhodes, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Restoration Retrofit

The factor specialty group was unable to evaluate the County Comprehensive Plan alternative in the time allotted. However, many of the groups overlap the needs of this group. Given the GIS needs of mitigation and ecosystem function, wildlife habitat, and listed species, this factor specialty group needs one additional GIS map of exotic plant communities. However, this map was given low priority by the group. An ADG member stated that not only is there vegetation restoration but there is also hydrologic restoration. The factor specialty group stated

that other specialty groups are addressing this issue. The factor specialty group addressing the issue of mitigation was also concerned with exotic species such as melaleuca. The group's GIS interpreter, Bill Jolly, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F.

Water Management

The factor specialty group addressed the factors necessary for evaluation of alternatives. The group identified a number of factors that were considered alternatives or portions of alternatives. These changes are reflected in Attachment G. The group determined that they need to be able to project the impacts of alternatives on flooding. Important elements of flooding are depth and duration. The SFWMD has data and tools for projection of flood depth and duration. Without having the GIS needs of the factor specialty group met, in the best professional judgment of the group, the County Comprehensive Plan alternative will continue to increase flooding events in the hub area. The group also identified the evaluation factor of water supply. Again further analysis is required, but the group indicated that this alternative would probably have a negative impact on water supply.

The group's GIS interpreter, Clarence Tears, presented the GIS needs for applying the factor in the evaluation of alternatives. See Attachment F. The SFWMD introduced a draft copy of the South Lee County Watershed Plan. The executive summary of this report is presented in Attachment H.

General GIS Comments and Requests

Throughout the discussions of GIS needs, a number of general comments and requests were provided concerning the GIS mapping and how they can be made more beneficial to the ADG and the attainment of its goal. A member suggested utilizing clear overlays for viewing the GIS layers. There needs to be some basic consistency among maps for ease of use (i.e., legends, keys, and colors coding). A number of members found errors that exist on the maps (i.e., missing areas of the Crew Trust). However, it was noted that these are the official versions of the published maps and had not been altered. It was suggested that the ADG needs two base maps (1) existing land use map and (2) existing land cover map. A GIS council of factor specialty group GIS interpreters was formed to address all the GIS issues of the ADG.

Comprehensive Plan Discussion (Continued)

There was discussion concerning the development and implementation of the County Comprehensive Plans aside from the development of alternatives and evaluation factors. There

was discussion with regard to the County Comprehensive Plans as being the “preferred” alternative. Dale Brown asked the ADG who’s preferred alternative does the comprehensive plan represent. It was stated it represents the county and states’ preferred alternative. A member noted that the use of “state” is an all encompassing reference that loosely refers to the Florida Department of Community Affairs (DCA). This alternative is one of many that the ADG must evaluate. Alternatives based upon the creative input of the ADG will also be developed and evaluated. This directly supports the needs of the Corps’ EIS.

It was stated the Comprehensive Plans are simply plans that are rarely followed through to the letter. There are always unforeseen changes. The maps of the Comprehensive Plans are supported by documentation found within the Plan. In these Plans, some of the natural resource responsibilities are placed on external natural resource agencies (i.e., Corps and the Florida Game and Fish Commission). Thus, some of the details of the County Comprehensive Plans differ from those respective agencies. Inevitably, information falls through the cracks causing miscommunication and inefficiency in the process. This EIS process will help add some level of certainty to the permit process in highlighting areas where permits may be more difficult to obtain. These conflicts could be prevented if there was some coordination with these external agencies during the development of the Comprehensive Plans. If the agencies can better understand how one another makes the call through a process like the Southwest Florida EIS some improvement will be realized.

The Comprehensive Plan is only one step in a system of checks and balances of permitting. There is a process to follow to assure all involved are kept in check. There was some concern stated that the counties are leaving the responsibility of wetlands and endangered species to the regulatory agencies. The lack of coordination is the reason the regulatory agencies are held responsible for takings decisions.

Some referred to the permit process as a cyclic process rather than linear. It was stated that it is a cyclic process as a result of bureaucracy. It was also stated that the process is cyclic for the purpose of checks and balances. Another member noted that a cyclic process, when efficiencies could be made, is bad business / government.

It was stated that the ADG should be developing criteria to address issues in certain geographical areas as opposed to changing the Future Land Use Map. It was reiterated by and another ADG member, that the ADG should be developing criteria not land use maps. Lastly, it was stated that the Comprehensive Plan is a disaster for all natural things and that alternatives to the Comprehensive Plan are critical.

Media

The topic of press releases was brought back to the ADG for discussion. It was stated that the public should be informed about the progress of the ADG and its objectives and that the press and public have been invited to the meetings. It was also stated that the public in general is

a reactionary group. A member responded that the process is scheduled to discourage public involvement. The meetings are held during the week while the residents of the study area are working. Thus, it would be a courtesy of the ADG to provide a press release of their progress. However, nearly all of the ADG decided not to provide press releases now. The ADG will decide to issue press releases when there is reportable progress.

Meeting Six Summary

Mr. Feather proposed a format of the summary presentation to the ADG similar to that of the previous meetings focused around the following topics.

- Activities (who, what, where, and why)
- Accomplishments
- Next steps
- Next meeting information

Mr. Feather offered the accomplishment topics of (1) presentation of water quality trends, (2) presentation of initial GIS needs of the ADG, (3) evaluation of the County Comprehensive Plans as one alternative for the hub, and (4) identified specific GIS needs. The summary presentation is provided in Attachment J.

Next Meeting

The seventh meeting will be held at The Conservancy auditorium in Naples on July 16 and 17, 1998. Topics of the meeting will be the continued presentation of GIS products, continued evaluation of the Comprehensive Plan alternative for the hub, and the evaluation of additional alternatives for the hub.

ATTACHMENT A

ALTERNATIVES DEVELOPMENT GROUP MEETING #6 ATTENDEES

**LIST OF ATTENDEES
ALTERNATIVES DEVELOPMENT GROUP
MEETING #6, JULY 9-JULY 10, 1998**

Members Represented:

Robert S. Baker
Council of Civic Associations

Rick Barber
Chief Executive Officer
Agnoli, Barber & Brundage, Inc.

Tom Beck
Department of Community Affairs

John Cassani
Lee County Hyacinth Control District

Wayne Daltry
Executive Director
SW FL Regional Planning Council

Clarence Tears (alternate for Claudia Davenport)
Big Cypress Basin Board

David Douglas
David Douglas Assoc., N Ft. Myers Chamber of Commerce

Kim Dryden
U.S. Fish and Wildlife Service

Tim Durham
Wilson, Miller, Barton & Peek, Inc.

Clara Anne Graham-Elliott and Gary Lee Beardsley (alternate)
League of Women Voters of Lee County

William Jolly (alternate for John Folks)
Department of Agriculture and Consumer Services

Edward Griffith and Terrance Dolan (alternate)
Director of Planning
WCI Communities

David Guggenheim
The Conservancy of Southwest FL

Jim Beever (alternate for Bradley J. Hartman)
Director, Office of Environmental Services
Florida Game and Fresh Water Fish Commission

Gary Maier (alternate for Peggie Highsmith)
Department of Environmental Protection

Ronald Inge
Harper Bros., Inc.

Wallace Kain
Mayor
City of Sanibel

Earl Kegg
Collier County Representative

Mark Morton (alternate for Richard Klaas)
Florida Real Estate Consultants

Bonnie Kranzer
Governor's Commission for Sustainable South Florida

Terry Rice (alternate for Al Lucas)
U.S. Environmental Protection Agency

Chip Merriam
Director, Fort Myers Service Center
South Florida Water Management District

Katherine English (alternate for Neale Montgomery)
Paves, Garner, Haverfield, Dalton, Harrison & Jensen

Bob Mulhere
Director, Collier County Planning

Paul O'Connor
Planning Division Director
Lee County

Robert H. Roth, P.E.
Barron Collier Partnership/Silver Strand Division

Fran Stallings

Mark P. Strain
Gulf Bay Communities, Inc.

Kris Thoenke
Director, Everglades Project
National Wildlife Federation

Matthew D. Uhle and Mike Roeder (alternate)
Economic Dev. Coalition of Lee Co.

Earl Kegg and Michael Reitmann (alternate for Whit Ward)
Collier Building Industry Association, Inc.

John R. Hall
Department of the Army, Jacksonville District Corps of Engineers, Regulatory
Division

Members Not Represented:

Bill Hammond
South Florida Water Management District

Observers:

Michael Simonik
TCI

Nancy Payton
FWF

W.T. Olds, Jr.
U.S. Fish & Wildlife Service

Tim Jones
Lee County

Cynthia Frisca
The Pegasus Foundation

Carole Green
Candidate

Ford Walton
DEP

Ron McGregor
DEP

Jeff Rhodes
SAIC/EPA

Ellie Krier
Chamber of Commerce

Jill Greenfield
EDC of Collier County

Jami Mc Cormick
Lee Co. Port Authority

Facilitation Team:

Timothy Feather
Program Manager
Planning and Management Consultants, Ltd.

Dale Brown
Lead Facilitator
Planning and Management Consultants, Ltd.

Michael Beezhold
Meeting Recorder
Planning and Management Consultants, Ltd.

ATTACHMENT B

REFERENCES

Storm Surge Atlas - Lee & Collier Counties
 Hurricane Preparedness/ Evacuation Study
 Hurricane Shelter Deficit Reduction Report
 Charlotte Harbor NEP Area Studies
 State of Bay - Agency for Bay Management
 Composite Strategies Conservation Map - Work in Progress
 South Florida Study - 1973
 Soil Survey of Collier County
 Soil Survey of Lee County, Florida
 Soil Survey: Detailed Reconnaissance Collier County, Florida: Series No. 8 (1942)
 Future Land Use Map: Collier County
 Open Spaces: Collier County (map)
 Generalized Existing Land Use Map, Collier County, Florida (1-7)
 Future Land Use Map (map 1): Lee County
 Map of Lee County: Existing Land Uses
 Nominations with Secondary Screening Criteria Ratings: Lee County (map)
 The 1994 Lee Plan: 1996 Codification: as amended through May 1997
 Lee County Planned Development Update: revised 1998
 Lee County Comprehensive Plan
 Wetlands map
 Lee County projects development approvals
 Lee County land use database
 Strategic Habitat Conservation Areas (map)
 Florida Black Bear: Potential Habitat (map)
 Florida Panther: Potential Habitat (map)
 Wading Bird Rookery, Bald Eagle, and Florida Scrub Jay locations
 Bio-diversity Hot Spots
 Collier County Manatee Mortality: 1/74-10/97 (map)
 Collier County Manatee Mortality: February 1998 (map)
 Lee County Manatee Mortality: February 1998 (map)
 Southwest Florida Region Regionally Significant Natural Resources (map)
 Collier, Hendry, and Lee County Future Land Use 2010: (Southwest Florida Regional Planning Council)
 Study Area of the Caloosahatchee Water Management Plan (SFWMD)
 Sustainable America: A New Consensus For Prosperity, Opportunity, and a Healthy Environment for the Future. (February 1996)
 Wetlands Regulation and the Takings Issue (Robert Multz)
 Takings Law in Plain English (Christopher Duerksen and Richard Roddewig)
 Closing the GAPS in Florida Wildlife (Habitat Conservation System, 1994)
 Southwest Florida Strategic Regional Policy Plan (1995)
 Southwest Florida District Water Quality – 1996 305(b) Technical Appendix
 Estero Bay Drainage Basin: Lee, Collier, and Hendry County
 The Local Impact of Home Building in Naples, Florida (1997)
 The Local Impact of Home Building in Lee County, Florida (1997)

Nation Association of Home Builders Local Impact of Home-building Model (1997)
Interim Final Guidance for Incorporating Environmental Justice Concerns in EPA's
NEPA Compliance Analyses (EPA 1997)
Microcomputers and Economic Analysis: Spreadsheet Templates for Local Government
(revised and expanded edition 1987)
Environmentally Sensitive Index maps: Peninsula 2 Florida
South Lee County Watershed Plan: draft (1998)

ATTACHMENT C

DEPARTMENT OF ENVIRONMENTAL PROTECTION PRESENTATION

ATTACHMENT D

GIS COMPREHENSIVE STRATEGY

ATTACHMENT E

GIS EXAMPLE REPORTS

ATTACHMENT F

GIS SUPPORT REFINED

Issue Category and GIS Interpreter	GIS Support Needs
Ecosystem Function, Wildlife Habitat, and Listed Species	Strategic Habitat Conservation Area
Contact: Jim Beever	Panther Priority Habitat map
	SW Florida - Significant Natural Areas
	Listed Species Point map
	Wading Bird Rookery map
	Native Habitat map
	Land Cover map
	Rare Habitat map
	Native Habitat map
	Seasonal Wetlands map
	EPA Priority Wetlands map
	Manatee Mortality map
	Seagrass Loss map
	Wetlands map
Regulatory Efficiency and Effectiveness	No GIS needs were identified
Contact: Bob Barron	
Cumulative and Secondary Impacts	MPO map
Contact: Jim Beever	Hurricane Zone map
	Land Cover map
	Wetlands map
	Public Lands map
	Lee and Collier County maps
Avoidance of Wetland Impacts	“Converted” maps displaying risk and function
Contact: Bob Barron	
Water Management	Historic flow patterns
Contact: Clarence Tears	Current flow patterns
	Inundated areas during stormwater events (10, 25, 100 year)
	Stormwater infrastructure
Water Quality	Historic and current mangrove coverage
Contact: Jeff Rhodes	Historic and current wetland coverage
	Groundwater recharge coverage & and recharge volumes
Restoration / Retrofit	Exotic plant communities
Contact: Bill Jolly	
Public Lands Management / Use	Land Cover map
Contact: Jim Beever	
Mitigation	“Converted” maps displaying risk and function
Contact: Bob Barron	
Economic Sustainability	Requires professional analysis

Contact: Paul O'Connor	
Property Rights	Planned developments: PUD and DRI
Contact: Paul O'Connor	Existing road network
	2020 road network
	Minority / low income populations
	Indian Tribal resources
	Value per acre
Local Land Use Policy	See property rights requested GIS support items
Contact: Paul O'Connor	

ATTACHMENT G

EVALUATION FACTOR REFINEMENT

WATER MANAGEMENT WATER QUALITY

EVALUATION FACTOR REFINEMENT

Measurement Name	Msmt. Type	Data Source	ADG POC/Date (Who will bring data & when)	Recommendation for ADG Use/Notes
G. Water Management				
G1. Flooding	depth: (25y/3day) duration	SFWMD Counties BCB	Chip Merriam	S. Lee Co. Study (10 days)
	Natural system depth and duration	“	“	“.
G2. Water supply	Aquifer impact & performance	SFWMD	Chip Merriam	
	quality of water: • saltwater intrusion	“	“	
	Natural system impact: • drawdown • other adverse effects	“	“	

EVALUATION FACTOR REFINEMENT

Measurement Name	Msmt. Type	Data Source	ADG POC/Date (Who will bring data & when)	Recommendation for ADG Use/Notes
G. Water Quality				
H1. WQI / TSI	Change, index value	STORET, FDEP, Lee Co. Environmental Lab		
H2. Freshwater pulses	acres converted to higher impermeable surfaces	Changes in current land cover		
H3. Habitat loss	change in wetland acreaage	GIS/DEP/NWI		
	change in mangrove acreage	GIS/DEP/NWI		
	acres of mangrove alternation	GIS/DEP/NWI		
H4. Groundwater impact	acres of development in areas of significant groundwater recharge	GIS/SFWMD		

ATTACHMENT H

SOUTH LEE COUNTY WATERSHED PLAN EXECUTIVE SUMMARY

ATTACHMENT I

HUB ALTERNATIVES

ATTACHMENT J

SUMMARY PRESENTATION MEETING No. 6